

Vol. 36 No. 10

ST. LOUIS ARMY ENGINEER DIST **ESPRI**

GATEWAY TO EXCELLENCE

October 1999

In this issue...

**Wappapello
roads**
... page 5

Camp Van Dorn
... page 6

Cannon ball
... page 9

River des Peres
... page 11

Greenway
... page 13

Health step
... page 14

Making the gate stand up straight

By Robert Kelsey, ED-DA

For over three weeks beginning in August, personnel from the St. Louis District Service Base and Mel Price Locks and Dam were involved in repairing the downstream miter gate at Mel Price Locks and Dam. The miter gate was damaged earlier this year when it was struck by a fully loaded towboat. Prior to making the repair, it was necessary to detension the miter gate diagonals and, following the repair, it was necessary to retension or "prestress" the diagonals. I directed the prestressing operation.

The diagonals on the miter gate are the visible straps oriented similar to an "X".

The function of the diagonals are to hold the gate plumb when it is stationary and to prevent the gate from twisting excessively while it is in motion or if it strikes an object while in motion.

Some of the smaller miter gates in the

District, such as at Locks 24 and 25, have diagonals on the upstream and downstream face. The large miter gates like those at Mel Price and Locks 27 have diagonals only on the downstream face.

The miter gates must be plumb when stationary so that when the gate is in the mitered (closed) position there is proper alignment and contact between the two miter gate leaves. A misaligned miter gate leaf is not safe to hold pool. Without diagonals, the miter gates hang in a twisted position due to their own weight, up to twelve inches out of plumb. By placing a prestress in the diagonals, the miter gate is forced into a plumb position. When the miter gate swings through the water it tends to twist. This twist causes the load in one diagonal to increase and the load in the other diagonal to decrease. A properly prestressed diagonal holds the miter gate plumb, but does not overstress or allow either diagonal to go slack as the gate swings through the water.



(Continued on page 10)



Commander's Perspective



COL Michael R. Morrow

"It is imperative that we do what is right, ethical and honest in all of our work."

Doing the 'right thing' seems simple enough; we all strive to do what is right. When we were small we were taught right from wrong by our parents in the home and reinforced by our teachers in school. We live our lives, work and raise our children with the values we learned when growing up. I believe that most people are decent human beings trying to live their lives in a society that is constantly changing. Most people, when put to the test, will choose the right over the wrong.

Working for the Federal Government as we all do puts us in the position of working for the taxpayers of this country. We serve the people of this nation by doing our jobs to the best of our abilities. Working for the Federal Government also puts us under the scrutiny of the public. It is imperative that we do what is right, ethical and honest in all of our work. Sometimes we are faced with situations that arise in our normal course of work that give us pause for thought. Some of these situations make it easy to decide what is right and some not. Misuse of government vehicles, computers and cheating on time cards are easy to decide. Some issues such as contracting and seeking additional or new employment opportunities can be more difficult. Sometimes it can be the perception of wrongdoing that causes problems. When faced with a dilemma, who can you seek out for advice? Who can you talk to about issues before they become problems?

As your commander, I am responsible for everything the District does right and everything the District fails to do. In the case of those things that are done right, it is always a pleasure to give the credit to those who did the job. In the case of those things that go wrong, I accept the blame. As your commander I take the responsibility of annual ethics training very seriously. I want you to have the knowledge and the tools to help you through those tough decisions. I am making a video on ethics with the assistance of the legal staff. I will personally present the ethics training this fall and spring to every employee in the district. We have ethics counselors on staff in the legal office who are trained to help you decide what is right and wrong based on law and regulations. Ask the hard questions and seek the advice of your supervisor or legal staff before the issue becomes a problem.



**US Army Corps
of Engineers**
St. Louis District

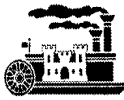
ESPRIT is an unofficial publication authorized under the provisions of AR 360-81. It is published monthly, by contract, in 1450 copies, by the Public Affairs Office, U.S. Army Engineer District, St. Louis. Views and opinions expressed in this publication are not necessarily those of the Department of the Army.

District Commander.....Michael R. Morrow

Chief, Public Affairs.....Sandra Clawson

Editor, Design, Layout.....Ken Kruchowski

Address mail to: U.S. Army Engineer District, St. Louis, ATTN: CEMVS
- PA, 1222 Spruce, St. Louis, MO 63103-2833. Phone: (314) 331-8000.
E-mail: Sandra.Clawson@mvs02.usace.army.mil



News Briefs

Carlyle Lake:

Haunted Trail

Halloween is approaching and with that comes the ninth annual Carlyle Lake "Haunted Trail", on October 22 and 23. Our Little Nature Trail is transformed by volunteers and businesses from the surrounding communities into many different scary stations along the trail. This is a family event for all ages. The brave souls meet at McDonald's for a hayride to the haunted trail. The cost is \$3 per person and all proceeds go to support the 2000 Carlyle Lake Fireworks Spectacular.

Cottage dedication

On Thursday, 2 September, George Ryan, Governor of Illinois and Brent Manning, Director of IL Department of Natural Resources dedicated 12 waterfront cottages located in the Eldon Hazlet State Park. The cottages consist of 3 duplexes and 6 single units with two bedrooms, kitchenette, full bath and

wet bar. In addition, Governor Ryan announced the area will receive \$3 million in grants to build 12 more cottages and road improvements at the State Park.

Lampe has 30 years

James B. Lampe completed 30 years of service on 7 September. Jim started his career in the U.S. Army in 1968 - 1970 and was a soldier in the 198th Light Infantry Brigade of the Americal Division and served in Vietnam 1968 - 1969. He says his experience in Vietnam, "makes you appreciate the United States of America and freedom". His picture was taken west of Chu Lai, South Vietnam, and featured in Newsweek (September 8, 1969 issue).

Jim started to work for the Corps at the Carlyle Lake Project in 1971 as a seasonal laborer in maintenance and through the years was promoted to tractor operator, work leader and at present a Park Ranger.

Rend Lake:

Benchmark mtg.

The St. Louis District hosted the first "Benchmark Meeting" for the St. Louis, Nashville, and Little Rock Districts. The brainchild of the three District's Chiefs of Operations, this meeting was held at the beautiful Rend Lake Resort on September 8th - 10th to allow managers a chance to compare operations, staffing, and programs and find what might be beneficial for their projects.

Floyd assistance

Mel Cundiff, who is part of the Rend Lake Facility Management Team, left St. Louis on Sunday, September 19 to assist in the emergency response for Hurricane Floyd. Mel and Rick Waggoner, CO-R, transported the St. Louis District's Rapid Response Vehicle to Fort Hamilton in Brooklyn, New York.

(Continued on page 4)



St. Louis District Employee of the Month

The St. Louis District Employee of the Month for October is Ms. Joan Brickey, Contracting Division.

Joan's conscientious effort to ensure the government got the best possible value on a contract is a testament to the Corps' tenet of revolutionizing effectiveness. Joan's evaluation of bidders on a contract resulted in the first two lowest bidders withdrawing their bids because they could not do the work for their bid price and the third lowest being disqualified. The fourth lowest bid, from a contractor with a successful track record, was accepted, still below the government estimate.

Congratulations to Joan Brickey, the St. Louis District Employee of the Month.



News Briefs (cont.)

Lake cleanup

For all who are superstitious, there was no bad luck involved with the 13th Annual Rend Lake Cleanup. Saturday, September 11, began the last cleanup of the millennium for Rend Lake. Our theme, "The Last of the Millenniums", and the message behind it was to evoke a feeling of ownership and stewardship for the lake and the environment in general to take into the next century. Through action, this message was illustrated and reinforced to the 465 volunteers that so willingly gave of their time and energy.

Close to \$1,000 worth of donated prizes were raffled off to lucky volunteers during the awards ceremony following the cleanup.

The amount of recyclable items picked up added up to nearly 80 pounds of aluminum, 500 pounds of glass, and 200 pounds of #2 plastic. The remaining non-recyclable garbage filled a 20 cubic yard dumpster. A student organization recycled the items that were collected as a fund-raiser for their organization.



Scouts clean up around the lake.



Col. Morrow talks to the winner of a new bike at the Rend Lake cleanup.

Wappapello Lake:

Commander's award

Natural Resource Specialist, Jim Gracey, recently received the Southwest Division Commander's Award for his work on the Beaver Lake Shore Line Management Plan



Gary Stilts (left), Assistant Project Manager, presents Jim with his award.

during his employment with the Little Rock District. Jim's hard work helped to develop a plan that was politically sensitive and accommodated all concerned parties.

Haunted house

The Corps, along with the Wappapello Lion's Club, will host a haunted house at the Bill Emerson Memorial Visitor Center on October 30. This free fright fest will be open from 6 to 10 p.m.

New showerhouse

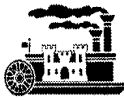
A shower house has been added to the facilities at Greenville Campground. This 111 site campground has been running near capacity since the shower house opened.



Workshop

The District has sent four park rangers to a scoping workshop for Park Offices and ReserveAmerica. The workshop is to fully address the Park Office software issues and determine the course of action over the next few months for the full implementation of the Park Office system Corps wide.

(Continued on page 12)



Wappapello Lake road relocations

By Tamara Atchley, PM-N

Wappapello Lake was authorized by the Flood Control Act (FCA) of 15 June 1936 and further amended by the FCA of 28 June 1938. The original project purpose was for flood control of the St. Francis River. Con-

nying real estate documents, the State released the Government from any and all damages to its facilities resulting from the construction, operation, and maintenance of the project.

A condemnation action was filed in which the Government acquired

from the lake would equal inflows until a release of 10,000 cubic feet per second (cfs) was reached at a pool level of approximately 368 feet. At higher elevations, releases were not to exceed 10,000 cfs. In 1966, probably in response to complaints from downstream landowners and in recognition of the fact that the planned levees downstream would not be built, the WCP was changed. Thereafter, releases would be held to 3,000-4,000 cfs during the crop season (May through November). Above a pool level of 385 feet, releases would be held to 7,000 cfs.

The WCP was changed after extensive study and review by the Mississippi River Commission (MRC) and Headquarters U.S. Army Corps of Engineers (HQUSACE). Approval of the modified interim plan of operation for Wappapello Reservoir was granted by the Lower Mississippi Valley Division and by HQUSACE. The modified plan considered the impacts to downstream areas by using the period of record available (1947-1967) and the damage curves for the agricultural lands and the crops and planting schedules. The methodolo-

(Continued on page 6)



Wayne County Road 221-A.

struction of the dam began in September 1938 and was completed in June 1941. Section 2 of the FCA of 1938 nullified the terms of the original authorization language and required the Corps of Engineers to acquire, in fee title or by flowage easement, all state and county roads located in the project area. In September 1940 and in April 1947, the United States entered into two contracts with the State of Missouri for the relocation or alteration of state highways as necessitated by the construction, operation, and maintenance of the Wappapello Lake Project. Pursuant to the terms of the contracts, and in consideration of the relocation/alteration work performed at Federal expense, the State either vacated or granted perpetual flowage easement rights over the affected state routes. By the execution of these contracts and the accompa-

either the fee interest, in Wayne County roads to be permanently vacated, or perpetual flowage rights over roads that were to remain open. A number of these county roads, subject to the Government's flowage rights, were later transferred by the county to the state, including those that are currently experiencing flooding problems (Highways D, BB, and FF).

At the time that these acquisitions took place, the Water Control Plan (WCP) for Wappapello Lake specified that releases



Overview of Highway D-3 construction.



Relocations (cont.)

gies employed tended to underestimate the impacts to the roads and highways above the dam at the time of approval of the revised WCP. Hydrologic/hydraulic investigations reveal that the revised WCP causes the roads to be flooded at greater frequency and to a greater depth than when the project was placed in operation because of changes in operation of the reservoir in accordance with the WCP adopted in 1966. In 1967 many alternatives to the WCP were examined in detail. No viable alternative was found which facilitates the downstream land use and, at the same time, does not adversely impact the state highways and county roads. The flooding due to the current WCP causes residents to lose road access to homes, and presents accessibility problems for emergency vehicles, school busses, and mail delivery.

Section 9 of the FCA of 1946 gives the Chief of Engineers the authority for remedial action on highways which are being damaged by the operation of a project. By this authority, the adverse possession of the state highways and county roads

are being corrected by the subsequent relocations and subordinations as recommended in the Wappapello Lake, St. Francis River, Relocation Design Memorandum, State Highways and County Roads, April 1996.

The road relocations were designed by AEs (Sverdrup Corporation (St. Louis), Black and Veatch (Kansas City), and Gulf Engineers and Consultants (Baton Rouge)). The final design contract was completed in FY99.

Two construction contracts have been awarded to date, both to 8A firms. The first construction contract for relocations on Wayne County Roads 221-A, 526 (site 3), 531, and 538 was awarded in July 1998 to Columbia Curb and Gutter Company, Columbia, MO. Work on that contract was completed in May 1999 at a final cost of just under \$988,000. The second construction contract was awarded in May 1999 for \$1,879,500 to KAJACS Contractors Inc., Poplar Bluff, MO, for relocation work on State Highway D (site 3 at Highway BB). Although the contract duration is 270 days, excellent construction weather this summer has the contractor significantly ahead of schedule.

Four additional relocation con-

struction contracts are planned, pending availability of funding. These contracts include State Highway BB, State Highway D (Site 4) and Wayne County Roads 523 and 526 (sites 1 and 2), State Highway D (sites 1 and 2), and State Highway D (sites 5, 6, and 7). All roads are being relocated at Federal expense.

In addition to the road relocations, State Highway FF and Wayne County Road 380 are to be subordinated. In order to prevent future development of non-Federal lands creating isolation of residences due to flooding of FF and County Road 380, land which requires access from FF is to be acquired in fee title at Federal expense. This subordination will not leave residences isolated from emergency services, mail, school bus, etc., but will require alternate routes during times of Highway FF flooding.

For over thirty years the Federal government has operated the reservoir, impacting the state highways and county roads and generating annually an estimated \$1,218,000 in additional flood damage prevention benefits to the downstream areas. Using 1997 interest rates these benefits have a value of \$132,000,000.

Photographs courtesy of Wappapello Lake staff.

Camp Van Dorn slaughter proved untrue

By Randal Curtis, ED-P

The Ordnance and Technical Service Branch of Engineering Division is colloquially known around the District as the "bomb folks", since a majority of our work involves investigating former and current military installations for explosive hazards. In 1998, we were assigned Camp Van Dorn as one of the Formerly Used Defense Sites

(FUDS) to complete an Archive Search Report. What began as a fairly typical investigation, expanded into something much larger as allegations that the Army murdered more than one thousand African American soldiers at Camp Van Dorn gained publicity.

Camp Van Dorn was fairly typical of the large temporary training camps the Army built during World War II. Activated in Sep-

tember 1942, it was located just outside of Centreville, Mississippi, near the Louisiana border. The Army trained ground force divisions there on the various ranges and impact areas. The camp closed in December 1945 and it subsequently returned to private ownership. Determining the areas of Camp Van Dorn with unexploded ordnance potential was our initial mission.



The week after the St. Louis District team completed a visit to Camp Van Dorn, Carroll Case's book, *The Slaughter: An American Atrocity*, was published. In his book, Case alleged that military police massacred 1,227 troops of the 364th Infantry Regiment, stationed at Camp Van Dorn between May and December 1943. The book was primarily a fictionalized account based on interviews and a handful of textual records.

Although almost too preposterous to consider at first, so too was the government's involvement in the Tuskegee Syphilis Study. The Army of World War II was a far cry from today, where the military is probably the most integrated part of American society. Mirroring the times, the Army was segregated and African American troops were treated as second class members. Accounts of confrontations or riots between black and white soldiers at military camps during World War II have been recounted in the past by various authors. The Navy's actions before and after the tragic Port Chicago, CA, ammunition depot explosion is another example of the maltreatment of African American troops during WWII. However, the Camp Van Dorn massacre story is far more malevolent. If it were true, even in part, it would have been one of America's darkest moments.

Initially, the Army discounted the book's assertions as unfounded for a number of reasons. Although the book states a specific number of people killed, not one victim is mentioned by name and there isn't a specific date when the crime occurred. Case, a white man, did not interview any of the members of the 364th Infantry Regiment, even

though some are still alive. The book was based primarily on interviews with white men, with most of the story coming from an individual who is now dead. The scope of Case's research effort was extremely limited and did not include any review of the records in the National Archives. The textual documents offered as proof were few and written months before the alleged massacre. Also, a massive cover-up would have been required to conceal such an event. The loss of that many men could not be covered up as an accident, but would require a broad corruption of the system.

Given these shortcomings, the Army did not believe the information presented warranted the re-

search effort.

LTC Charles Graul and others at the U.S. Army Center of Military History (USACMH) at the Pentagon headed up research efforts at the National Archives. This research proved to be inconclusive. In April 1999, the USACMH tasked the St. Louis District to assist in researching the massacre allegations. St. Louis's research efforts were twofold: An aerial photo analysis of part of Camp Van Dorn and identification of all members of the 364th Infantry Regiment while at Camp Van Dorn, including the date and circumstances surrounding their separation from the Army.

The aerial photo investigation



Part of the ED-P team - back row: Elinor Reinerman, Cheryl Shannon, Randal Curtis, Jennifer James, Riley Pope. Front row: Shelia Thomas, Ken Brimm, Ida Morris.

sources to perform an exhaustive research project on the subject. The National Association for the Advancement of Colored People (NAACP), concerned about Case's claims, and unsatisfied with the level of investigation by the government, launched their own research effort to determine the veracity of the massacre story and the details concerning the 364th at Camp Van Dorn. Their research eventually

was undertaken to determine if the observable features at Camp Van Dorn supported or disproved Case's allegation that the murdered troops were buried on site. Rick Webster of ED-SG analyzed the historic aerial photos for ground conditions and land use indicative of a mass burial but found none.

Although the second project of identifying all the personnel in the

(Continued on page 8)



Van Dorn (cont.)

364th may sound simpler, it was a much larger and more difficult task. As a historian, I led the research effort which included half the personnel (i.e. 18 people) in the Ordnance and Technical Service Branch at times. The research took place at the National Personnel Records Center, Military Personnel Records (NPRC, MPR) in St. Louis, MO. The NPRC, MPR, houses the records for military personnel for most of the 20th century, including all of the 364th Infantry Regiment. Personnel at the NPRC, MPR, worked weekends and nights to accommodate the strenuous demands of the research project. Because of the private nature of personnel records, they are generally exempt from the Freedom of Information Act requests and not really available for review except by the individual or next of kin. The St.

Louis District received special permission from the U.S. Army Reserve Personnel Command and the Office of the Surgeon General, Department of the Army, to review these records.

The files reviewed included monthly unit payroll rosters, Official Military Personnel Files (OMPF) and individual final pay vouchers. Ideally, this information would be fairly easy to extract; however, many of the files no longer exist and those that do exist are in generally poor condition. The NPRC, MPR, had a fire on 12 July 1973 that destroyed approximately 16 to 18 million OMPFs. The NPRC, MPR reconstructed a portion of the lost records but only half the soldiers in the 364th had a personnel file, and many of those were incomplete. Most of the original records that survived the fire are partially burned and water damaged. For others without an OMPF, the re-

search team traced their separation date through final pay vouchers or found other post Van Dorn information in Department of Veterans Affairs records.

Eventually separation dates for all but 20 of the enlisted men of the 364th were found. For those 20, the research team was able to locate auxiliary information proving they did not die at Camp Van Dorn (i.e. later VA medical claims or dates of their passing away as civilians). By these investigations, the St. Louis District was able to show that the allegations in Case's book are false and hopefully put to rest rumors that Army committed the alleged atrocity.

Other members of the research team not shown included: Steve Dvorak, Michael Dace, Shirley Boyer, Nancy Gerth, Shirley Hamilton, Kirk James, Pam Reed, Cynthia Ward, Theresa Williams, Fred Miller, and Jim Luebbert.

ED-P personnel certified to sign radioactive waste manifests

By Gregg Kocher, ED-P

As part of the Formerly Utilized Sites Remedial Action Program (FUSRAP), personnel from the Ordnance and Technical Services Branch, Engineering Division (ED-P), recently have been authorized to certify and sign the Uniform Low Level Radioactive Waste manifests for railcar shipments of material from the St. Louis Airport Site (SLAPS). The certifiers, consisting of four Safety Specialists and two Quality Assurance Specialists, underwent training at the School of Military Packaging Technology at Aberdeen Proving Ground, Maryland, attended the

"Radioactive Waste Packaging, Transportation and Disposal Workshop" PROSPECT course, and passed the Army's intensive, three-week, radiation safety course held at Fort McClellan, Alabama.

The certification process involves a visual inspection of the railcars and the protective liners designed to prevent leakage, commonly called "burrito bags," that contain the soil inside the cars. Initially the certifiers were required to dress in modified level 1 protective clothing prior to entering the contaminated area for visual inspection. An alternative to this process was found, however, by using the same gate as the rail workers, thereby

allowing a faster, safer and more efficient approach. Upon completion of the visual inspection, all paper work involved must be checked to verify radioactivity calculations. Only then is the manifest signed.

Since the end of June, over 100 railcars of soil and debris have been shipped safely to the Envirocare facility in Utah. The material shipped has varied all the way up to Class 9 Miscellaneous Hazardous Waste and Class 7 Radioactive Waste. Starting October 1st, the certifiers from ED-P will be responsible for all rail shipments, including those from the St. Louis Downtown Site (SLDS).



The case of the radioactive cannon ball

By Gregg Kocher, ED-P

Most people know what a nuclear weapon is, but how many have heard of a radioactive Civil War cannonball? The discovery of two Civil War-era projectiles at the St. Louis Downtown Site (SLDS) of the Formerly Utilized Sites Remedial Action Program (FUSRAP), prompted further investigation of the spoil excavated from a large pit. The pit is located on property owned by the Mallinckrodt Chemical plant, which processed uranium for the Manhattan Project during World War II in the development of the atomic bomb. Historical research shows that prior to Mallinckrodt's occupation of the site, a stove manufacturer had a foundry and pig iron yard there. It is surmised that the two projectiles were scrap iron that was to be smelted.

Hank Counts of the Ordnance and Technical Services Branch (ED-P) of Engineering Division, drafted a work plan, which was

and harmonized the effort with leaders at Huntsville and Mallinckrodt.

On Saturday, September 11, Safety Specialists from ED-P, Hank Counts, myself and George Sloan, all former military bomb disposal technicians, who also have extensive training in radiation safety, met with contractor safety representatives and equipment operators at the SLDS. Once the required briefings were given, entering the exclusion

zone surrounding the pit necessitated donning protective clothing: Tyvek coveralls, two rubber booties over work boots, three pairs of gloves, as well as hard hat and safety glasses.

Using magnetometers that detect ferrous metal, Counts and I searched the pile of dirt, then had rough terrain dump trucks affectionately called "T-Rex", haul it away. Sloan performed quality assurance at another location using a Mark 26 ordnance locator as a final check.

The highlight of the day came when a lump of metal was detected in the gray clay that turned out to be a cannonball. The 4.5-inch sphere was cleaned, then

checked for radioactivity by health physicists. The round had scaly rust, but was otherwise in good condition. Initially believed to be solid shot, the round was handed over to the St. Louis Police Department's Bomb and Arson Squad, who were standing by. They transported the cannonball in a bomb containment



Hank Counts and Gregg Kocher search for unexploded ordnance using Magnetometers.



eventually approved by both the Huntsville Engineering and Support Center and the Mallinckrodt corporation. Mike Dace, Chief of ED-P and I, as Engineering Division Technical Coordinator, facilitated

vessel and later returned with a surprise.

Wraps of detonating cord had removed the rust and exposed a fuse hole containing a time fuse that was described as being made of tarred cloth. A hollow cavity inside held black powder that was still capable of being ignited after 130+ years. The cannonball is believed to be a Confederate 12-pounder common shell.

The team continued to work until sunset, having searched over 250 cubic yards of material. At the conclusion of work, the site had been stabilized in accordance with the work plan. The success of this mission was due to teamwork, partnering and prior coordination at all levels.



Gate (cont.)

The St. Louis District is a pioneer in an improved method of prestressing miter gate diagonals. The standard method still used throughout the Corps of Engineers is to manually twist the miter gate so that one of the diagonals goes slack. At that time the nuts on the threaded diagonal ends are tightened by hand. The miter gate is twisted differently to successively make each diagonal slack and the nuts are tightened. The standard method to manually twist the miter gate is to block one end and push or pull on the other end. This method is somewhat dangerous and is inaccurate; it is difficult to make the gate hang plumb.

The St. Louis District began using hydraulic tensioners first at Mel Price Lock. In this method, the diagonals are fabricated so they terminate into four separate and smaller threaded rods. The smaller rod size allows the use of hydraulic units that can be easily handled. The hydraulic units grip the threaded portion of the rod beyond the nut. Then, after pressurizing the hydraulic units, each nut may be easily turned down. No manual twisting of the leaf is required and it is extremely accurate. It is possible to force a 400,000 lb. miter gate into a position within 1/16 inch of plumb. Since installing this type of diagonal at Mel Price, similar diagonals have been installed at all of the District's Mississippi River Locks, including the replacement miter gates for Lock 24 that are currently under construction.

Before beginning the actual prestress operation, instruments were placed on the diagonals. Tom Ruf of the Structural Section in-

stalled strain transducers to monitor the stress in each diagonal during the prestress procedure. It is necessary to monitor the stress in the diagonal so that it can be compared to the required values. The strain transducers mounted on the diagonals are temporary and are removed at the completion of prestressing operation. Additionally, Tom Ruf directed the installation of load cells upon the threaded rods at the upper ends of the diagonals. This permanent instrumentation allows the continuous monitoring of the loads in the individual threaded rods. This instrumentation is set up so that data may be monitored from the District office. The loads in the threaded rods are useful in that it may indicate a problem such as an obstruction or silt buildup in the lock chamber. Either of those conditions would cause an increase in load to the diagonals.

The diagonal prestressing was accomplished by first placing load in one diagonal while maintaining zero load in the other diagonal. This causes the gate leaf to twist in the opposite direction from the natural twist that occurs due to its own weight. Load was placed until the net twist of the leaf was in the opposite direction of the natural twist. The tensioners were then moved to the other diagonal and load was placed until the net twist of the gate leaf was drawn back to zero. Several small adjustments were required to ensure that the minimum prestress values had been met and the twist, or plumb dimension, was less than 1/16 inch as determined by a survey crew. The result of the prestressing operation is a force in each diagonal in excess of a half million pounds.

The prestressing method developed by the St. Louis District ap-

pears to be safe and efficient. Since all of the District's Mississippi River locks have been converted, there has been interest from other Districts that now have plans to utilize the method when it becomes necessary to prestress miter gate diagonals.

CFC slogan

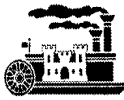
The East-West Gateway Combined Federal Campaign (CFC) will officially run between October 4 and December 15, 1999. The St. Louis District will hold a Campaign Slogan Contest specifically for District team members.

Consider what the CFC accomplishes or what the CFC means to the beneficiaries. Use your creativity to develop a slogan that will be used to promote the CFC during the St. Louis District campaign.

A panel of volunteers from among the Emerging Leaders will judge the entries. The panel will receive only the slogan entries. In the event of duplicates, only the first one received will be eligible.

The name of the winner and the winning slogan will be announced at the District kickoff rally (date not yet determined). Submit your entries to the Security Office prior to Friday, October 22. The contest is open to every current District employee. Entries can be made by e-mail or hardcopy.

So put your creativity to work and submit those entries.



Lower River Des Peres Feasibility Study

By Pat O'Donnell, PM-F

The Flood of 1993

The River des Peres is a channelized stream located near the southern edge of the city of St. Louis. Like many areas near the Mississippi River, the flood of 1993 heavily damaged the neighborhoods around the River Des Peres. Major

River des Peres proved favorable for three of the nine sub-areas, labeled Area D, Area F, and Area I, so in 1998 St. Louis District began the Lower River des Peres Feasibility Study. We will soon send out a draft report for public review and policy review. In December we hope to begin design work, and hopefully in 18 months construction



View upstream toward I-55 bridge of River des Peres channel. Area D is on the right.

industries including the Solutia plant lost millions of dollars because of lost production. The flood closed small businesses and flooded residents out of their homes.

Study, design and construction schedule

After the flood of 1993, St. Louis District conducted the St. Louis Region Reconnaissance Study. The study looked at nine areas in St. Louis City, St. Louis County, Jefferson County, and Ste. Genevieve County. The Lower River Des Peres portion of the St. Louis Region Study consisted of nine sub-areas that are separated from each other by high ground. The study results for the Lower

can begin. We are trying to have the project completed in three years.

Project features

The project along Germania Boulevard that protects the Solutia Plant and the homes nearby is known as Area D. The Area D project's main feature is a mass stabilized earth (MSE) wall between the channel and Germana Boulevard. The MSE wall will have a vertical wall on each side with pervious fill in the middle. The project also includes two road closure structures and a short levee segment. As this is a fully urbanized area, there are no environmental concerns or mitigation.

Challenges

Several challenges have confronted the study team. The Area I levee along Carondelet Boulevard that was proposed in the reconnaissance study had to be changed to a mass stabilized earth wall because there wasn't enough width for the levee. Both Area D and Area I are attempting to use a relatively new type of closure structure invented by the Rock Island District made out of the same sheet metal and support structures as interstate highway signs. Most importantly, the preferred alignment for the flood protection project intended to use land purchased after the flood of 1993 using FEMA funds. FEMA deed restrictions for these land parcels prohibit structures, and FEMA determined that levees were structures. From November 1998 to the present, the project team has continued the feasibility study with the hope that this issue can be resolved. Cost estimates for avoiding the FEMA buy-out land show that the increased cost will kill the project. However, FEMA has proven to be a cooperative partner in this effort and we believe we can reach a resolution.

This month's test sentence

Only at one time did the situation become acute and crucial enough for us to call in a qualified expert to provide assistance to find solutions to our employee problems.

Revision on page 12



Our new employees



The Dredge Potter has a new electrician. He is James Novotny of Bonne Terre, Missouri. Jim comes to us from the National Imagery and Mapping Agency where he was an electronic mechanic. He also operates a 120 acre farm with his wife and four sons.

News Briefs (cont.)

Mark Twain Lake:

Astronomy

The lake staff is hosting "An Adventure in Astronomy" on Saturday, October 9, at the John F. Spalding Recreation Area. A program entitled "They Fall From the Night Sky" by Park Ranger Steve Wagner and Mr. Larry Ault, Indiana State University, will begin at 7:30 p.m. Dr. David Ziegler, from Hannibal LaGrange College and Mr. Richard Booth from Moberly will have large telescopes set up for viewing and will point out objects of interest and answer questions.

Deer hunt

The Corps, in partnership with the Paris Lions Club, has scheduled the Annual Deer Hunt for the Physically Challenged on November 21 and 22 in the Indian Creek Recreation Area. The hunt will be restricted to 20 permanently disabled individuals having a valid 1999 Missouri managed deer tag and a hunter safety certification card. Contact the Mark Twain Lake

Project Office for information or applications.

Rend Lake mining update

The last coal mine operating at Rend Lake is beginning to cause quite a stir in the area. Consolidation Coal Company continues to mine coal under Rend Lake in the Nason Point area. Local citizens are beginning to become concerned about the potential impacts to wildlife habitat. Although most of the mining is under the lake itself, which causes no negative impacts, a portion of the mining is under land that is part of the Rend Lake Refuge. After areas are mined using the long-wall method, subsidence of the surface from 4 - 6 feet is experienced. The Corps staff at Rend Lake, along with personnel from PD, RE, OC, and the Illinois Department of Natural Resources, is working with Consol to develop mitigation plans and agreements.

The unique habitat on Nason Point will be hard to replace, but lake and district personnel are

working to get proper compensation from the Consolidation Coal Company. As part of the process to mitigate wildlife habitat that will be affected by the subsidence, St. Louis District employees Keith McMullen (CO-F) and Ray Zoanetti (CO-B) are currently conducting shorebird surveys on the waterfowl refuge at Rend Lake in Jefferson County, Illinois.

Shorebirds are long distance migrants that breed for the most part in the high Arctic and migrate to Central and South America for the winter. Some of these species migrate as much as 20,000 miles twice a year between their wintering and breeding grounds. Rend Lake is one of the most important resting sites for these birds in Illinois. The refuge provides shorebirds with a place to rest and feed, while replacing body fat to continue their journey.

So far, the survey has revealed that at least 19 species of shorebirds including pectoral sandpipers, sanderlings, lesser yellowlegs and willets use the refuge for resting and refueling. Ten sample surveys are to be completed by October 1 by the Corps team. Additionally, two overall surveys by a team from the Illinois Department of Natural Resources are to be conducted and the data compared.

Sentence revision

Only once did the situation become crucial enough for us to call in an expert to help solve our employee problems. *Traps avoided: at one time, acute and crucial, qualified expert, provide assistance and find solutions.*



Confluence Greenway, Ecosystem Restoration

By Michelle Brown, PM-F

Picture this: You are walking under a canopy of silver maples. In the distance you can see cottonwoods, oak trees and native prairie grasses. Occasionally you see another walker, a bicyclist, or a person on horseback enjoying the trails that are carefully woven into the landscape. Soon you emerge from the trees and join the stream of

able to walk or cycle from the Arch along the Riverfront Trail, cross the Mississippi on the Old Chain of Rocks Bridge and continue north to Pere Marquette State Park.

The Corps Project: We were recently approached by Trailnet, Inc., one of the partners in the Confluence Greenway project, and asked to assist in the portion of the project that is on Choteau Island (at

the east end of the Old Chain of Rocks Bridge). They are buying about 500 acres of land and plan to construct trails on it. The land is currently used primarily for farming but there are also a few former borrow areas for the adjacent landfill.

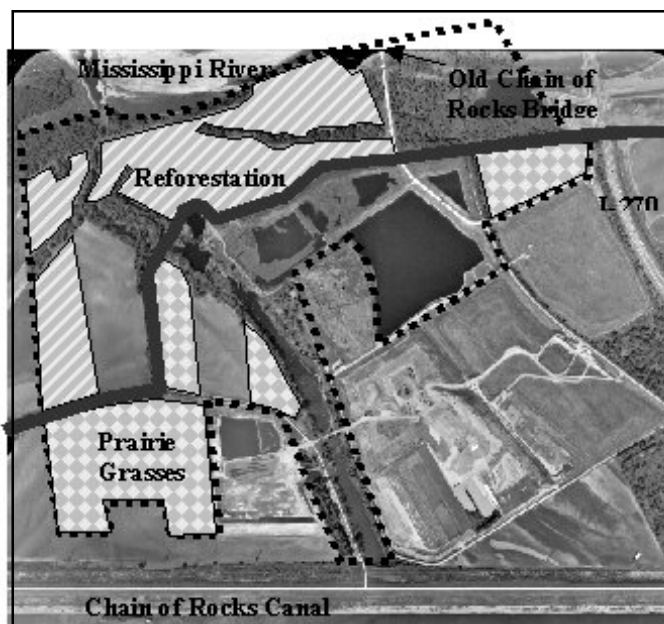
Trailnet wishes

also vary from wet meadow species to more upland species, depending on the amount of standing water they will regularly experience.

Our project currently consists of approximately 125 acres of reforestation and 120 acres of prairie grasses. We have just completed the Preliminary Restoration Plan, which is a \$10,000 initial assessment of Federal interest. IDNR now has the opportunity to review this document and, if they concur with our findings, return a Letter of Intent indicating that they are interested in pursuing the project as the non-Federal sponsor. We must then seek project approval from MVD. The entire project is anticipated to cost approximately \$850,000, with about \$650,000 as land acquisition costs. If MVD approves the project this Fall, construction should begin in FY01.

* * *

Trailnet, Inc., received a 1999 Rebuilders Award from the Rebuild St. Louis Foundation. They won the award for converting the old Chain of Rocks Bridge, closed for 30 years, into the world's longest bicycle and pedestrian bridge. It is open full time during the summer and on weekends after Labor Day. It provides magnificent, sweeping views of the Mississippi river, and is an excellent eagle-watching location.



people that is flowing onto the Old Chain of Rocks Bridge. From the middle of the bridge, you watch barges and pleasure boats as they make their way up and down the great Mississippi River.

This is just part of the dream of the partners in the Confluence Greenway project. The entire project is a 40-mile riverside park and trail system extending from the Gateway Arch north on both sides of the Mississippi River to its confluence with the Illinois River. Once the Greenway is completed in 2004, residents and visitors will be

to return the land to its natural state so trail users will have a pleasant place to visit.

As one of our first steps, we asked our potential sponsor, the Illinois Department of Natural Resources (IDNR), what they would like to see on the island. They suggested returning it to its original state of native prairie grasses and bottomland forest. Our plan includes planting a mix of trees - flood-tolerant willows, cottonwood and silver maples in low areas and less tolerant oak and hackberry on higher ground. The grasses will



To your health

October is prime time to get a flu shot

The best time to get your flu shot is from mid-October to mid-November. Getting it then gives your body time to build protective antibodies against the virus before the annual flu bout begins in December.

Who should get the shot? Everyone should, especially those who want to avoid a week of fever, coughing, muscle aches and fatigue.

Immunized workers have more than 40 percent fewer sick days and doctor visits, studies show.

Flu vaccines offer up to 90 percent protection for healthy adults. Chronically ill or older people may not mount as effective a response to the vaccine, says epidemiologist Dr. Paul Gleason at Baylor College

of Medicine in Houston. Others in the household should be vaccinated for an added measure of protection.



Myths about flu shots still circulate. The truth: You can't get the flu from taking a flu shot. The vaccine is made of killed virus particles.

Besides healthy, working adults, who else should get a flu shot? Pregnant women who will be in their second or third trimester during flu season. Studies show they are at increased risk of being hospitalized with complications of the flu. Also at risk are people over age 65 and those with heart or lung disease, diabetes, kidney disease or immune suppression, and children on aspirin therapy who risk developing Reye's syndrome if they get influenza.

How about a prediction of a moderate or light flu season? Don't believe it.

Get your flu shot now.

The most significant health step you can take

If doctors found one silver bullet that would prevent dozens of conditions and diseases, it would make the headlines. If this same silver bullet added years to human life, it would be hailed worldwide.

That silver bullet of health and longevity actually exists today. It's called exercise.

Do you have a book on better health? Look up the word "exercise" in the index. You will be surprised at the number of physical conditions associated with this one term. In *Disease Free* by the editors of *Prevention*, some three dozen conditions are shown to be improved or prevented by this one silver bullet. The list starts with anxiety, arthritis and asthma, goes

on to cancer, diabetes, fatigue and heart disease, and ends with stress reduction, stroke and weight control.

Anyone with the will to exercise can reap the huge benefits of looking better, feeling better and living a longer, more satisfying life. And it's so simple: Just take a walk and do it often. To start exercising, that's all you have to do, especially if you haven't had much physical activity for some time.

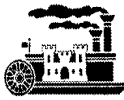
Make an appointment with yourself to exercise when you schedule your week's activities. Exercise with a spouse or friend, or join a club. Adjust your program regularly to keep it fresh.

To maintain motivation, add an activity you enjoy doing to your ex-

ercise plan. Walk, take an exercise class, or ride a bike. Do it for half an hour three times a week.

Wheelchairs that climb stairs

The new IBOT wheelchair by Johnson & Johnson is in final clinical tests. It uses gyroscopes and electronic sensors to mimic the way people maintain their balance. IBOT can easily traverse curbs and climb or descend stairs. With the lift mechanism, occupants can reach top shelves at grocery stores and hold eye-level conversations with adults who are standing. IBOT will be available in 2001 and cost \$20,000 plus.



Retiree Review

By the Retiree Correspondent

The retirees had their monthly luncheon on September 19th at the Salad Bowl at 11 a.m. Where were you?

This month there were two new attendees, Dave and Pat Oelrich. Dave said that although he did not retire from the Corps, since he spent about twenty years with the District, he thought he could qualify as a retiree. Those in attendance agreed that any retiree from the government service could qualify. Dave said he is kind of interested in history and he recounted that shortly after he was employed with the District, in about 1967, he went to a "cake and coffee" for someone retiring in the District Office. He didn't remember his name, but did remember that the retiree gave an account of his career with the Corps. He said that he started as a "copier" on one of the dredges, explaining that it was his job to copy, by hand, radio reports from other dredges and then transmit the information by radio to the District Office. It seems that radio transmission was somewhat limited in distance, so the dredges would send messages to the next closest dredge to the District Office for forwarding. Also, it seems that there was no carbon paper on the dredges, since he said that the reports had to be hand written three times. (How times have changed.)

Joe Bisher was asked to reflect on his many years on the dredges and try to identify the individual. Joe thought that it could have been Dan Courtney. He remembers that Dan started out on the dredges and eventually retired as Chief of the Radio Section. In any event, it was an interesting story.

Dave mentioned that he sees Don Chrismore occasionally and that Don is currently working for a contractor that is building the Ste. Genevieve pump station. (Good for him. Looks like Don can't keep away from construction.) Also, Dave said he was at the luncheon because Dick Pierce convinced him to come and would meet him there. And then Dick doesn't show. (What a guy.)

Speaking of Joe Bisher... He provided the group with a wealth of information about the Gateway Arch, since he is now one of the workers there. He is very knowledgeable about the Arch, just like he was about Grant's Farm. His presentation always makes you want to hear more. He mentioned that he had heard that Terry Laws had passed away the day before. He couldn't believe it, since he had been with him just recently. Terry had been Chief of the Contracts Division for many years. Our condolences to his family.

Bob Maxwell picked up on the history thing started by Dave Oelrich and recounted how he had to reconstitute personnel records after the passage of the Civil Service Retirement Act. He said he spent almost a full year in the lower

levels of the Old Post Office going over all the old payroll ledgers. He also mentioned that in those days their per annum salary was about \$1,260, and that they always had money. (Man, that was a long long time ago.) He mentioned that he was also instrumental in establishing a District Basketball team and entered it in the Industrial Basketball League in the city. They had teams from all the large companies in the area. I believe he said they did fairly well.

Lew Scheuermann said he recently had a visit from the Thomures, Bill and Ursula. Seems that they were in town to visit Ursula's sister. After dinner, the Thomures and the Scheuermanns played cards and the Thomures made enough to get them back to Florida.

Lew had a newspaper article that was provided by Charlie Denzel about the Sherbines celebrating their 70th wedding anniversary. Congratulations to the Sherbines for their many happy years (WOW! That's a long time to stay together. And they said it wouldn't last.)

Lew said he talked to the Huizengas recently. They are both doing well, although Estelle is under the weather a bit. Lew also said that John Jansen is doing well, but that he no longer volunteers at St. Anthony's Hospital. It was getting to be too much for him. (Take a rest, John. You deserve it.)

Pete Puricelli said he recently met Jean and Bill Lindhorst. Bill has sold his real estate business, but still works part time and Jean also works part time. She said what many wives say when their husbands retire. "I married you for better or for worse, but not for lunch." This way they each have their own life and encounter each other occasionally. (Sounds like good advice.)

Pete also mentioned that he met Joan King, Bob Maxwell's secretary, at Affton Athletic Field. Joan was playing 3rd base on a ladies team and can handle herself very well on the field. Pete... Well he was just a spectator at a game on the next field.

Everyone in attendance agreed that the luncheon was very entertaining. How about you joining us and adding to the entertainment. The next luncheon is scheduled for October 21st at the Salad Bowl at 11 a.m. Hope to see you there.

* * *

The Retiree Review in the September issue of ESPRIT reported the death of Neil Krigbaum's wife and that Neil himself had previously passed away. Pete Puricelli reports that he received a call from Neil himself, and it wasn't a long distance call. Neil said that it was his mother who recently passed away and the reference to the late Cyrus was about his father. Neil is very much alive. Our apologies to the Krigbaum family for this error.

October is Domestic Violence Awareness Month

By Dawn Luebbert White, Security Office

Domestic violence is a workplace issue. This may sound like a new way to look at an age-old problem, but the fact is that domestic violence affects the workplace in terms of bottom-line economics, productivity, and employee safety and well being. Nearly four million women are battered in this country every year, and most are working women. Domestic violence can result in reduced productivity, increased medical expenses, absenteeism, and increased risk of violence at the workplace.

Domestic violence is a pattern of assaultive and coercive behaviors, including physical, sexual, and psychological attacks, as well as economic coercion, which the perpetrator uses as a means of achieving compliance from or control over the victim.

* It is purposeful conduct perpetrated by adults or adolescents against their intimate partners in current or former dating, married, or cohabiting relationships of heterosexuals, gay men, and lesbians. Statistics for the US Justice Department estimate that over 90% of all victims of domestic violence are women.

* While actual physical assault may occur, the abuser is also very likely to use non-assaultive types of abuse, such as verbal abuse or economic control. For example, economic control can occur when the abuser prevents the victim from getting to work by taking away car keys, controlling the household income, or denying money for day-to-day needs.

* These patterns include a variety of tactics which are carried out in multiple, sometimes daily episodes. The result of this is that the victim can be disoriented and in a perpetual state of fear because it is unknown what the next episode of abuse will be or when it will take place.

Domestic violence in the workplace is a broad concept that encompasses behavior that occurs both on and off the worksite. Domestic violence in the workplace includes all behavior that interferes with an individual's capability to safely and securely perform their duties at work. It includes all kinds of conduct, ranging from harassing or repeated telephone calls and/or "show-ups" (perpetrator appears at the workplace) to homicide. Sleep deprivation and physical injuries occurring outside the workplace may also impact on an individual's ability to perform their job.

The Employee Assistance Program (EAP) is designed, by nature of its service definition and program objectives, to respond to employees with any personal concern that impacts their ability to function or diminishes the quality of their lives. EAP counselors routinely respond to requests for assistance with domestic violence problems, providing safety planning,

crisis counseling and referrals to shelters, counselors, legal resources, and other necessary services. If you or one of your employees is being affected by this type of behavior, or if you suspect that one of your employees is a perpetrator of abuse, please contact the EAP representative at 314-966-4800 or 1-800-288-8764, the Human Resources Office, or your supervisor. If you are in an abusive relationship, you may wish to communicate with your supervisor about the situation so they are aware of the circumstances. This will help them to understand how the situation may be impacting on your ability to adequately perform your job.

There are tools available at the Federal workplace to protect your safety and help you rebuild your life. You may need time off to go to court, find a new place to live, or recover from injuries; there are many leave options available. Check with your supervisor or the Human Resources Office for the agency policy and procedures for requesting leave. You may also need a different workspace or a different schedule to keep the abuser from tracking you down on the job. Talk with your supervisor about the options available to you. These tools are not labeled specifically as "domestic violence" measures, but are simply the flexibilities available to every Federal employee under appropriate circumstances.

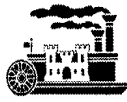
Call 1-800-799-SAFE for referrals to people nearby who can keep you safe. The St. Louis District Security Office also has numerous resources available and points of contact in the local community for any employee who may need assistance. Please stop by the office or call (314) 331-8065 or 8066 for more details. For more information about helping to stop domestic violence in the community and workplace, call 1-800-END-ABUSE.

The District Security Office will be distributing the following handouts to all Division/Office Chiefs during the month of October:

- * Work to End Domestic Violence
- * Safety Planning Guide from Barnes-Jewish Hospital
- * US OPM - Responding to Domestic Violence: Where Federal Employees Can Find Help

Please see your supervisor or stop by the Security Office if you are interested in receiving any of these handouts.

The Workplace Responds to Domestic Violence - A Resource Guide for Employers, Unions, and Advocates from the Family Violence Prevention Fund and The US Office of Personnel Management - Responding to Domestic Violence: Where Federal Employees Can Find Help were used as resources.



ESPRIT